

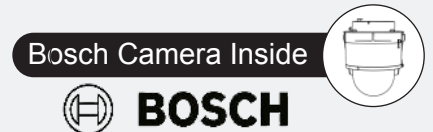
# Spectrum D412-X-NDP-5522-Z30-BD

Explosion-Proof HDTV 1080p with 30x zoom PTZ Camera

**EXPLSION**  
PROOF CAMERA

## Key Features

- HDTV 1080p with 30x optical zoom, 16x digital zoom
- Starlight camera technology with excellent lowlight performance
- 120dB dynamic range lets you capture details in overexposed situations with confidence
- Intelligent streaming, IDNR and H.265 reduce bit rate by up to 80%
- Built-in Essential Video Analytics to trigger relevant alerts and quickly retrieve data
- High resolution bubble to ensure maximum effective resolution output
- Reliable Securing Kit included
- Made in USA
- NDAA-Compliant
- cFMus, Class I/II/III, Division 1, Zone 1/21, IECEx, ATEX, INMETRO, UKCA and PESO approved.
- Operating Temperature: -20°C to +55°C



## Description

Spectrum D412-X-NDP-5522-Z30-BD explosion-proof camera is a cost-efficient, high performance PTZ with HDTV 1080p with 30x optical & 16x digital zoom. Enclosed in a patented stainless-steel or red aluminum explosion-proof housing, it's certified (cFMus, IECEx, ATEX, INMETRO, UKCA and PESO approved) for use in potentially combustible environments. Specially designed and tuned for applications requiring surveillance in scenes with varying light levels, the AUTODOME IP starlight 5000i camera has an integrated 30x optical zoom to identify people at a maximum distance of 183 m (600 ft) with minimal loss of detail.

# Specifications

## Spectrum D412-X-NDP-5522-Z30-BD

Camera		Network	
Image sensor	1/2.8" CMOS Effective Pixels (H x V) - 1945 x 1097 Total Sensor Pixels - 2.13MP Approx.	Ethernet Base	10/100BASE-T
Lens	30x Optical - 16x Digital Zoom Focal Length - 4.5 to 135mm Aperture (F) - 1.6 to 4.4 Horizontal Field of View - 2.4 to 60.9°	Conformity	ONVIF Profile S; ONVIF Profile G; ONVIF Profile T
Sensitivity	Lowlight technology - Starlight Color - 0.0186 lux Monochrome - 0.0040 lux	Protocols	IPv4; IPv6; UDP; TCP; HTTP; HTTPS; RTP/RTCP; IGMP V2/V3; ICMP; ICMPv6; RTSP; FTP; ARP; DHCP; mAPIPA (Auto-IP, link local address); NTP (SNTP); SNMP (V1, MIBII); SNMP (V3, MIBII); 802.1x, EAP/ TLS; DNS; DNSv6; DDNS (DynDNS.org, selfHOST.de, no-ip.com); SMTP; iSCSI; DiffServ (QoS); LLDP; SOAP; CHAP; Digest authentication
Platform	Common Product Platform - CPP7.3 Memory RAM (MB) - 512MB RAM, 256 MB Flash	Analytics	
Video		Analysis Type	Essential Video Analytics
Backlight Compensation	On/Off - Intelligent Auto Exposure (IAE)	Alarm Triggers	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle / removed object; Counting; Occupancy; Crowd density estimation; Condition change; Similarity search; Tampering
Camera Functionality	Backlight Compensation (BLC) Display Stamping	Configurations	Silent VCA; Profiles 1 - 16
Day Night Modes	Auto - Color - Monochrome	Object Filters	Duration; Size; Aspect ratio; Speed; Direction; Color; Object classes (4)
Gain Control	AGC	Calibration	Automatic self-calibrating when height is set
WDR Technology	HDR	General	
High Dynamic Range (HDR) dB	120 dB	Casing (x)	A = Aluminum S = Stainless Steel
Number of Privacy Masks	32	Weight	A = 28 lbs (13.2 kg) S = 55 lbs (24.95 kg)
Number of Sectors	16	Dimensions	Height: 13.2 in (335 mm) ø 8.6 in (218 mm)
Privacy Masks Pattern	Black; White; Gray; Auto color	Power	Power Supply - PoE PoE Input - IEEE 802.3 at Power consumption - Maximum 25 W
Shutter Modes	Automatic Electronic Shutter (AES)	Storage Conditions	-40°C to 60°C (-40°F to 140°F) Humidity 5–95% RH (non-condensing)
Tours	Recorded tours: two (2), maximum total duration 15 minutes (depending on the amount of commands sent during recording); Pre-position tour: One (1), consisting of up to 256 scenes consecutively, and one (1), customized up to 64 scenes	Operating Conditions	-20°C to +55°C (-4°F to 131°F) Humidity 10-100% RH (condensing)
White Balance Modes	Basic; Standard; Dominant color; Sodium lamp auto	Warranty	5-year limited warranty, see spectrumcamera. com/warranty
Video Streaming			
Camera Processing Latency	<200 ms		
Frame Rate (fps)	60 fps		
Resolution	1920 x 1080; 1280 x 1024; 1280 x 720; 768 x 432; 512 x 288; 704 x 576; 640 x 480		
Type of Stream	High resolution H.26x stream; M-JPEG stream; I-frame only from stream 1		
Video Compression	H.264 (ISO/IEC 14496-10); M-JPEG; H.265/ HEVC		
Audio			
Audio input/output	Line In - Line Out		
Compression	G.711 8 kHz; L16 16 kHz; AAC; 16kHz		

# Approvals & Dimensions

## Approvals

### Hazardous Area

FM3600, FM3615, ANSI/ISA/EN/IEC/CAN/CSA-C22.2 60079-0, ANSI/UL/EN/IEC/CAN/CSA-C22.2 60079-1, ANSI/UL/IEC/EN/IEC/CAN/CSA-C22.2 60079-31

### EMC

EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35

### Safety

IEC/EN/UL 60950-22, IEC/EN/UL 62368-1, IS 13252

### Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9)

### Network

NIST SP500-267

## Explosion-proof Certifications

### USA (Divisions):

Class I Division 1 Groups B,C,D T6, type 4X, IP66/67

Class II/III, Division 1, Groups E,F,G T6

Ta = -20°C to +55°C

Certificate: FM17US0156X

### USA and Canada (Zones):

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta

-20°C to +55°C, Type 4X, IP66/67

Zone 21, AEx/Ex tb IIIC T85 °C Db Ta = -20°C to +55°C,

Type 4X, IP66/67

Certificate: FM17US0156X and FM18CA0103X

### ATEX:

II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67

II 2 D Ex tb IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67

Certificate: FM18ATEX0057X

### IECEX:

Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb

IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67

Certificate: FMG 18.0020X

### INMETRO:

Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb

IIIC Db T85 °C Ta = -20°C to +55°C, IP66/67

Certificate number: NCC 20.0083 X

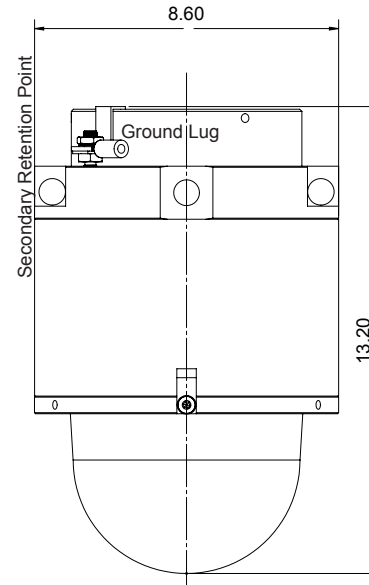
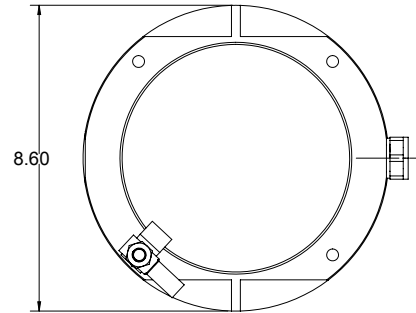
### PESO:

Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66/67 Ex tb

IIIC T85 °C Db Ta = -20°C to +55°C, IP66/67 Certificate:

FMG 18.0020X

Approval No: A/P/HQ/MH/104/7899 (P578984)



CERT NO. FM17US0156X



8935 ALMEDA GENOA RD.  
HOUSTON, TEXAS 77075  
USA

INPUT: IEEE802.3 at, 25W;

MODEL NUMBER: D412-X-NDP-5522-Z30-BD SERIAL: TIME-MO-DY-YEAR

Class I Division 1 Groups B,C,D T6, Type 4X, IP66

Class II/III, Division 1, Groups E,F,G T6

-WARNINGS: Ta = -20°C to +55°C

-NOT INCLUDING KETONE OR ESTER ATMOSPHERES

-CONDUIT ENTRIES ARE M20 X 1.5

-DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

-INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428

US Patent D858611



SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY  
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA  
No. SERIE: TIME-DY-MN-YEAR



NCC 20.0083 X

Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C

Ex tb IIIC T85°C Db Ta = -20°C to +55°C

IP66



-Patente EUA 9917428

-Patente EUA D858611

### ATENÇÃO:

- ENTRADAS DE CABOS M20 X 1.5

- NÃO ABRA ENQUANTO LIMA ATMOSFERA EXPLOSIVA PUJDER ESTAR PRESENTE

- INSTALAR ANEL DE VEDAÇÃO NAS ENTRADAS

- NÃO ABRIR QUANDO ENERGIZADO

- RISCO POTENCIAL DE CARGA ELETROSTÁTICA - VER INSTRUÇÕES



SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY  
8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075 USA



MADE IN USA

CERT NO.

FM17US0156X & FM18CA0103X



MODEL: D412-X-NDP-5522-Z30-BD SERIAL: TIME-MO-DY-YEAR

INPUT: IEEE802.3 at, 25W;

Class I, Zone 1, AEx/Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, Type 4X, IP66

Zone 21, AEx/Ex tb IIIC T85°C Db Ta = -20°C to +55°C, Type 4X, IP66

II 2 G Ex db IIB+H2 T6 Gb Ta = -20°C to +55°C, IP66

II 2 D Ex tb IIIC T85°C Db Ta = -20°C to +55°C, IP66

CERT NO. FM18ATEX0057X & IECEX FMG 18.0020X

WARNING: DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

INSTALL SEAL AT ENCLOSURE ENTRY

US Patent 9917428

US Patent D858611

www.spectrumcamera.com